

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method executed by a computer of determining a desired product corresponding to a user objective, comprising the steps of:
 - (a) providing a first said user objective;
 - (b) providing a first set of input data selected from one or both of wellbore data and reservoir data;
 - (c) automatically generating a first workflow in response to the first user objective;
 - (d) automatically selecting a first subset of one or more software modules of a first tool and a second subset of software modules of a second tool in response to the first workflow;
 - (e) executing ~~said~~ one or more software modules of the first subset on ~~[[in]]~~ a processor in response to said first set of input data; ~~and~~
executing one or more software modules of the second subset on said processor in response to output from the one or more software modules of the first subset; and
 - (f) determining a first said desired product in response to ~~[[the]]~~ at least executing the software modules of the first and second subsets, wherein the first said desired product includes a model of a reservoir to be produced by a well ~~step (e).~~

2. (Currently Amended) The method of claim 1, further comprising:

- (g) providing a second said user objective;
- (h) providing a second set of input data;
- (i) automatically generating a second workflow in response to the second user objective;
- (j) automatically selecting a third subset of one or more additional software modules of the first tool and a fourth subset of software modules of the second tool in response to said second workflow, wherein the third subset is different from the first subset, and the fourth subset is different from the second subset;
- (k) executing ~~said one or more additional~~ software modules in the third subset on said processor in response to said second set of input data; ~~and~~
executing one or more software modules in the fourth subset on said processor in response to output from the one or more software modules of the third subset; and
- (l) determining a second said desired product in response to the executing the software modules of the third and fourth subsets ~~step (k)~~.

3. (Currently Amended) A computer-readable medium ~~program storage device~~ readable by a computer machine tangibly embodying a set of instructions executable by said computer machine to perform method steps for determining a desired product corresponding to a user objective, said method steps comprising:

(a) receiving a first said user objective;

(b) receiving a first set of input data selected from one or both of wellbore data and reservoir data;

(c) automatically generating a first workflow in response to the first user objective;

(d) automatically selecting a first subset of one or more software modules of a first tool and a second subset of software modules of a second tool in response to the first workflow;

(e) executing ~~said~~ one or more software modules in the first subset on a processor in response to said first set of input data; ~~and~~

executing one or more software modules of the second subset on said processor in response to output from the one or more software modules of the first subset; and

(f) determining a first said desired product in response to ~~the~~ at least executing the software modules of the first and second subsets, wherein the first said desired product includes a model of a reservoir to be produced by a well ~~step (e).~~

4. (Currently Amended) The computer-readable medium ~~program storage device~~ of claim 3, said method steps further comprising:

- ~~(g)~~ receiving a second said user objective;
- ~~(h)~~ receiving a second set of input data;
- ~~(i)~~ automatically generating a second workflow in response to the second user objective;
- ~~(j)~~ automatically selecting a third subset of one or more additional software modules of the first tool and a fourth subset of software modules of the second tool in response to said second workflow, wherein the third subset is different from the first subset, and the fourth subset is different from the second subset;
- ~~(k)~~ executing ~~said one or more additional software modules in the third subset on said~~ processor in response to said second set of input data; and
executing one or more software modules in the fourth subset on said processor in response to output from the one or more software modules of the third subset; and
- ~~(l)~~ determining a second said desired product in response to the executing the software modules of the third and fourth subsets ~~step (k).~~

5. (Currently Amended) A system responsive to a set of input data and a user objective ~~adapted~~ for generating a desired product corresponding to said user objective, comprising:

- first apparatus ~~adapted~~ for receiving a first said user objective and a first set of input data selected from one or both of wellbore data and reservoir data;
- second apparatus ~~adapted~~ for automatically generating a first workflow in response to the first user objective;
- third apparatus ~~adapted~~ for automatically selecting a first subset of one or more software modules of a first tool and a second subset of software modules of a second tool in response to the first workflow; and
- processor apparatus ~~adapted~~ for automatically executing ~~said one or more software modules of the first subset~~ in response to said first set of input data, executing one or more software modules of the second subset in response to output from the one or more software modules of the first subset, and generating a first said desired product in response to at least the execution of said one or more the software modules of the first and second subsets, wherein the first said desired product includes a model of a reservoir to be produced by a well.

6. (Currently Amended) The system of claim 5, wherein:

said first apparatus receives a second said user objective and a second set of input data;

said second apparatus automatically generates a second workflow in response to the second user objective;

said third apparatus automatically selects a third subset of ~~one or more additional~~ software modules of the first tool and a fourth subset of software modules of the second tool in response to said second workflow, wherein the third subset is different from the first subset, and the fourth subset is different from the second subset; and

said processor apparatus automatically executes ~~said one or more additional~~ software modules in the third subset in response to said second set of input data, executes one or more software modules in the fourth subset in response to output from the one or more software modules of the third subset, and generates a second said desired product in response to the execution of the ~~said one or more additional~~ software modules of the third and fourth subsets.

7. (Currently Amended) A method executed by a computer for determining a final product in response to a user objective, comprising the steps of:

(a) providing said user objective and providing input data selected from one or both of wellbore data and reservoir data;

(b) generating a specific workflow corresponding to said user objective;

(c) selecting a plurality of software modules in response to said specific workflow, said plurality of software modules including a first subset of software modules having a first predetermined sequence, and a second subset of software modules having a second predetermined sequence;

(d) executing said ~~plurality of~~ software modules of the first subset in said first predetermined sequence in response to said input data; ~~and~~

executing said software modules of the second subset in said second predetermined sequence in response to output of the first subset of software modules; and

(e) generating said final product when the execution of said plurality of software modules ~~in said predetermined sequence~~ is complete, wherein said final product includes a model of a reservoir to be produced by a well.

8. (Cancelled)

9. (Currently Amended) The method of claim 7 [[8]], wherein ~~the executing step (d)~~
~~comprises the steps of:~~ executing said first ~~subset plurality~~ plurality of software modules in said first
predetermined sequence in response to said input data ~~thereby generating~~ generates conditioned
data; and executing said second ~~subset plurality~~ plurality of software modules in said second
predetermined sequence is in response to said conditioned data, said final product being
generated when the execution of said second ~~subset plurality~~ plurality of software modules in said
second predetermined sequence is complete.

10. (Currently Amended) A computer-readable medium ~~program storage device~~ readable
by a computer machine tangibly embodying a set of instructions executable by the computer
~~machine~~ to perform method steps for determining a final product in response to a user
objective, said method steps comprising:

(a) providing said user objective and providing input data selected from one or both of
wellbore data and reservoir data;

(b) generating a specific workflow corresponding to said user objective;

(c) selecting a plurality of software modules in response to said specific workflow, said
plurality of software modules including a first subset of software modules having a first
predetermined sequence, and a second subset of software modules having a second
predetermined sequence;

(d) executing said ~~plurality of software modules of the first subset~~ plurality of software modules of the first subset in said first
predetermined sequence in response to said input data; and

executing said software modules of the second subset in said second predetermined
sequence in response to output of the first subset of software modules; and

(e) generating said final product when the execution of said plurality of software
modules ~~in said predetermined sequence~~ is complete, wherein said final product includes a
model of a reservoir to be produced by a well.

11. (Cancelled)

12. (Currently Amended) The computer-readable medium ~~program storage device~~ of claim 10 ~~[[11]]~~, wherein ~~the executing step (d) comprises the steps of:~~ executing said first subset plurality of software modules in said first predetermined sequence in response to said input data ~~thereby generating~~ generates conditioned data; and executing said second subset plurality of software modules in said second predetermined sequence is in response to said conditioned data, said final product being generated when the execution of said second subset plurality of software modules in said second predetermined sequence is complete.

13. (Currently Amended) A system ~~adapted~~ for determining a final product in response to a user objective, comprising:

first apparatus ~~adapted~~ for receiving said user objective and receiving input data selected from one or both of wellbore data and reservoir data;

second apparatus ~~adapted~~ for generating a specific workflow corresponding to said user objective;

third apparatus ~~adapted~~ for selecting a plurality of software modules in response to said specific workflow, said plurality of software modules including a first subset of software modules having a first predetermined sequence, and a second subset of software modules having a second predetermined sequence;

fourth apparatus ~~adapted~~ for executing said ~~plurality of~~ software modules of the first subset in said first predetermined sequence in response to said input data~~[:]~~ and executing said software modules of the second subset in said second predetermined sequence in response to output of the first subset of software modules; and

fifth apparatus ~~adapted~~ for generating said final product when the execution of said plurality of software modules ~~in said predetermined sequence~~ is complete, wherein said final product includes a model of a reservoir to be produced by a well.

14. (Cancelled)

1 15. (Currently Amended) The system of claim 13 [[14]], wherein the fourth apparatus
2 ~~adapted for executing said plurality of software modules in said predetermined sequence in~~
3 ~~response to said input data comprises:~~

4 apparatus adapted for executing said first subset plurality of software modules in said
5 first predetermined sequence in response to said input data ~~thereby generating~~ generates
6 conditioned data; and the fourth apparatus ~~adapted~~ for executing said second subset plurality of
7 software modules in said second predetermined sequence is in response to said conditioned
8 data, said final product being generated when the execution of said second subset plurality of
9 software modules in said second predetermined sequence is complete.

1 16. (New) The method of claim 1, wherein executing the one or more software modules of
2 the first subset causes conditioning of the input data to provide the output that includes
3 conditioned input data.

1 17. (New) The method of claim 16, wherein conditioning the input data includes
2 interpreting the input data.

1 18. (New) The method of claim 1, further comprising using the reservoir model to predict
2 performance of producing from the reservoir.

1 19. (New) The computer-readable medium of claim 3, wherein executing the one or more
2 software modules of the first subset causes conditioning of the input data to provide the output
3 that includes conditioned input data.

1 20. (New) The computer-readable medium of claim 19, wherein conditioning the input data
2 includes interpreting the input data.

21. (New) The computer-readable medium of claim 3, further comprising using the reservoir model to predict performance of producing from the reservoir.

22. (New) The system of claim 5, wherein executing the one or more software modules of the first subset causes conditioning of the input data to provide the output that includes conditioned input data.

23. (New) The system of claim 22, wherein conditioning the input data includes interpreting the input data.

24. (New) The system of claim 5, wherein the processor apparatus is to further use the reservoir model to predict performance of producing from the reservoir.

25. (New) The method of claim 7, wherein executing the first subset of software modules causes conditioning of the input data to provide the output that includes conditioned input data.

26. (New) The method of claim 25, wherein conditioning the input data includes interpreting the input data.

27. (New) The method of claim 7, further comprising using the reservoir model to predict performance of producing from the reservoir.

28. (New) The computer-readable medium of claim 10, wherein executing the first subset of software modules causes conditioning of the input data to provide the output that includes conditioned input data.

29. (New) The computer-readable medium of claim 28, wherein conditioning the input data includes interpreting the input data.

- 1 30. (New) The computer-readable medium of claim 10, wherein the method steps further
2 comprise using the reservoir model to predict performance of producing from the reservoir.
- 1 31. (New) The system of claim 13, wherein executing the first subset of software modules
2 causes conditioning of the input data to provide the output that includes conditioned input data.
- 1 32. (New) The system of claim 31, wherein conditioning the input data includes
2 interpreting the input data.
- 1 33. (New) The system of claim 13, further comprising a sixth apparatus to use the reservoir
2 model to predict performance of producing from the reservoir.